Georgia Department of Transportation

Interoffice Memo

DATE: December 11, 2019

Margaret B. Pirkle

FROM: Margaret B. Pirkle, P.E., Chief Engineer

TO: Chief Engineer Divisions/Districts/Consultant Relations Committee

SUBJECT: **Mast Arm Guidance**

The Office of Traffic Operations is currently in the process of revising the Signal Design Guidelines. One of the changes in the design guidelines will clarify the preferred support method for traffic signals to read:

"Mast arm poles are preferred for all new traffic signal installations and upgrade installations… Other support types may be considered if the application of mast arms is not feasible due to field conditions. Decorative mast arms are allowed; however, they are not included as part of the GDOT standard installation and the local agency will be required to cover the additional expenses."

This guidance shall apply to both signal upgrades, lump sum programs, and capital improvement projects; and will be included in the upcoming revised Traffic Signal Design Guidelines Manual. Mast arms should be used where practical to do so. This guidance is effective immediately and applies to all projects where PFPR has not been held. Projects currently in the design process may continue as designed. Any variance should be reviewed and approved by the State Traffic Operations Engineer.

For clearance of Section 106 of the National Historic Preservation Act of 1966 for signal upgrade projects, the installation of mast arms will be covered under GDOT and SHPO's Traffic Signal Upgrades Memorandum of Understanding. At intersections where mast arms are installed (vs. strain poles, for example) the Area of Potential Effect will not include the viewshed, and the survey of historic resources will not be required thus reducing the time required for Resource Identification within the P6 schedule. Project Managers are advised to provide the specific locations of the upgrades and the type of signal upgrades (mast arms or strain poles) prior to requesting Resource Identification from the Office of Environmental Services.

Please note that there are situations where a mast arm will not be feasible based on requirements for right-of-way, utilities or mast arm length. Consideration of local and district preferences may also be used to justify the installation of span wire configurations.

GDOT District Offices have provided data showing that although mast arms may have a higher up-front cost, mast arms provide a higher benefit cost than strain poles over time due to less required maintenance and a longer life cycle.

If there are any questions about this guidance, please contact Andrew Heath, State Traffic Engineer at (404) 635-2828.

MP:AVS:KWN:KESD:JTB:smd